NMAM INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to VTU, Belgaum)
(AICTE approved, NBA Accredited, ISO 9001:2008 Certified)
Nitte – 574110, Karkala, Udupi District, Karnataka, India.

Department of Computer Science and Engineering

14CS603 - Java and Internet Technologies

Marks Distribution for SEE exam

Execution (Part A + Part B)	15+15
Write up	5+5
Viva	10
Change of one question	-5

Part - A

1. Write a java program for generating 2 threads, one for printing even numbers and the other for printing odd numbers.

2. Create a base class and derived class having data and overridden function members. Demonstrate the dynamic method dispatch.

3. Create a class customer for a bank. Class account should inherit the properties of customer and having 'type of account' and 'interest rate' as members. Use constructors in base and derived class to initialize the data members. An account may be created with zero initial deposit. (Use default arguments, super keyword). Implement the methods Deposit (), Withdraw (), and Get_Balance() to operate on account.

4. Create a class as Student. Write a program in Java to display the names and roll numbers of students. Create an array of 10 students and initialize the array with user input. Handle ArrayIndexOutOfBoundsExeption, so that any such problem doesn't cause illegal termination of program. Read a character from user and display the student names starting with given character.

5. Create a class as Student. Write a program in Java to display the names and roll numbers of students in sorted order. Place the read and display functions in a package. Handle any possible exception, so that any such problem doesn't cause illegal termination of program.

6. Define a Person class with three data members' age, name and gender. Derive a class called Employee from Person that adds a data member 'emp_code' to store employee code. Derive another class called Specialist from Employee. Add a method to each derived class to display the information about what it is. Write a program to generate an array of three ordinary employees and another array of three specialists and display the information about them. Also display the information of the specialists by calling the method inherited from employee class.

7. Write a frame program that inputs the three floating point numbers from the user and display the sum, avg, largest of three these numbers.

8. Consider the string "NMAMIT" [Nitte] (Autonomous Institute) {Karkala}. Write synchronized thread program to print this string. Demonstrate the importance of synchronization.

9. Develop a set of methods, which work with an integer array. The methods to be implemented are:-
(i) min (which finds the minimum element in the array)
(ii) scale .(multiply the array elements by suitable scale factor)
Place this in a package called p1. Let this package be present in a folder called "myPackages", which is a folder in your present working directory. Write a main method to use the methods of package p1.

Part – B

10. Create a frame/Swing that is having a List View to select the city, Text box to enter the name, phone number. Radio button to choose the gender and check box to choose hobbies. Create an alert to display the selections made by the user.

11. Write a program to copy the contents of two files in to one file.

12. Write a Java program to perform the following operations in a Random Access File (assume three fields).
i)Insert a Record   ii)Display Records

13. Write a frame/Swing program that is having an radio buttons to draw circle, line, rectangle. Another set of radio buttons to choose the background color. The color of frame background should be set to the selected color.

14. Write a JDBC program to perform the following operations on a table Accounts.(Account Number, Name and Balance).
i)Insert a record   ii) Delete a record   iii) Display All records.

15. Write a JDBC program to perform the following operations on a table student (USN,NAME) .
i)Insert a record   ii) Update a Record   iii) Search the name of a given USN.

16. Create a socket program using TCP sockets to send message between client and server.

17. Create a socket program using UDP sockets to send message between client and server.

18. Design a form using html which contains two textboxes namely First name and Last name and a submit button. After entering values for textboxes and clicking Submit button it should display first name and last name as a server response . Write a JSP code for this scenario using GET or POST method .